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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,881	04/15/2004	Katsumi Saitoh	42479-8300	7326

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EXAMINER

KAO, CHIH CHENG G

ART UNIT	PAPER NUMBER
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2882

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/824,881	<b>Applicant(s)</b> SAITOH ET AL.	
	<b>Examiner</b> Chih-Cheng Glen Kao	<b>Art Unit</b> 2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 May 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 14-19 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 14-19 and 24-31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
- 1. ☒ Certified copies of the priority documents have been received.
  - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/16/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on May 16, 2006. These drawings are acceptable.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: (paragraph 135, line 4, "turntable 23a").

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claims 1-6, 14-19, and 21-31 are objected to because of the following informalities, which appear to be minor draft errors including grammatical and/or lack of antecedent basis problems.

In the following format (location of objection; suggestion for correction), the following corrections may obviate their respective objections: (claim 1, line 7, “the measurement of mass and composition”; inserting - -analysis of- - before “composition”), (claim 14, line 15, “composition analyzing unit and”; inserting a comma after “unit”), (claim 26, line 5, “the target material”; replacing “matter” with - -material- - in line 3 of claim 26), (claim 27, line 11, “the composition analyzing unit and the”; inserting a comma before “and”), (claim 27, line 12, “of filter member”; inserting - -the- - before “filter”), (claim 28, line 1, “The particulate matter analyzer of claim 29”; changing the dependency of claim 28 from claim 29 to claim 27), (claim 28, line 2; replacing “analyzing” with - -analysis of- -), (claim 28, line 2, “the deposited particulate”; inserting - -matter- - after “particulate”), (claim 28, line 3, “of filter member”; inserting - -the- - before “filter”), (claim 29, line 1, “The particulate matter analyzer of claim 29”; changing the dependency of claim 29 from claim 29 to claim 27), (claim 29, line 2, “of filter member”; inserting - -the- - before “filter”), (claim 30, line 1, “The particulate matter analyzer of claim 31”; changing the dependency of claim 30 from claim 31 to claim 27), and (claim 31, line 1, “The particulate matter analyzer of claim 32”; changing the dependency of claim 31 from claim 32 to claim 27).

Claims 2-6, 15-19, 21-26, and 28-31 are objected to by virtue of their dependency. For purposes of examination, the claims have been treated as such. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-6 and 21-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites wherein the measurement of mass and analysis of composition is performed continuously on the same particulate matter on the filter within the particulate matter analyzer. Although the application as originally filed describes wherein the measurement of mass and analysis of composition is performed continuously on particulate matter on a plurality of filters passing through the mass measuring unit and the composition analyzing unit (figs. 1, 4, or 5), the application as originally filed fails to describe wherein the measurement of mass and analysis of composition is performed continuously on the same particulate matter on the filter within the particulate matter analyzer. Since the claim contains subject matter that was not described in the specification as originally filed, the claim has been rejected for having new matter. Claims 2-6 and 21-23 are rejected by virtue of their dependency.

5. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "can" in lines 3 renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Allowable Subject Matter***

6. Claims 1-6 and 21-23 would be allowable if applicant provides a convincing showing to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action. Claims 14-19 and 24-31 would be allowable if amended to overcome the claim objections(s) set forth in this Office action. The following is a statement of reasons for the indication of allowable subject matter.

7. Regarding claim 1, prior art fails to disclose or fairly suggest a particulate matter analyzer, including a composition analyzing unit for analyzing composition of particulate matter while on a filter, where the measurement of mass and analysis of composition is performed continuously on the same particulate matter on the filter within the particulate matter analyzer, in combination with all the limitations in the claim. Claims 2-6 and 21-23 contain allowable subject matter by virtue of their dependency.

8. Regarding claim 14, prior art fails to disclose or fairly suggest a system for collecting particulate matter in a fluid and analyzing mass of the particulate matter and its composition,

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including a composition analyzing unit for analyzing the composition of the particulate matter while on a filter member, a transporting unit for moving one of a plurality of filters from a sample fluid supplying unit to respectively a mass measuring unit and the composition analyzing unit, and a controller unit for automatically enabling a collecting unit, mass measuring unit, composition analyzing unit and transporting unit, wherein a plurality of measurements with a plurality of filter members are carried out continuously on the particulate matter over a predetermined time period, in combination with all the limitations in the claim. Claims 15-19 and 24-26 contain allowable subject matter by virtue of their dependency.

9. Regarding claim 27, prior art fails to disclose or fairly suggest a particulate matter analyzer, including a composition analyzing unit for analyzing composition of the particulate matter on a filter member, and a controller unit for automatically enabling a collecting unit, mass measuring unit, composition analyzing unit, and transporting unit to perform a plurality of measurements on a series of predetermined lengths of the filter member automatically over a predetermined time period without an operator, in combination with all the limitations in the claim. Claims 28-31 contain allowable subject matter by virtue of their dependency.

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 1-6 and 21-23 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Cheng Glen Kao whose telephone number is (571) 272-2492. The examiner can normally be reached on M - F (9 am to 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



gk

Courtney Thomas  
Courtney Thomas  
Primary Examiner

Katsumi Saitoh et al.  
10/824,881  
42479-8300  
REPLACEMENT SHEET

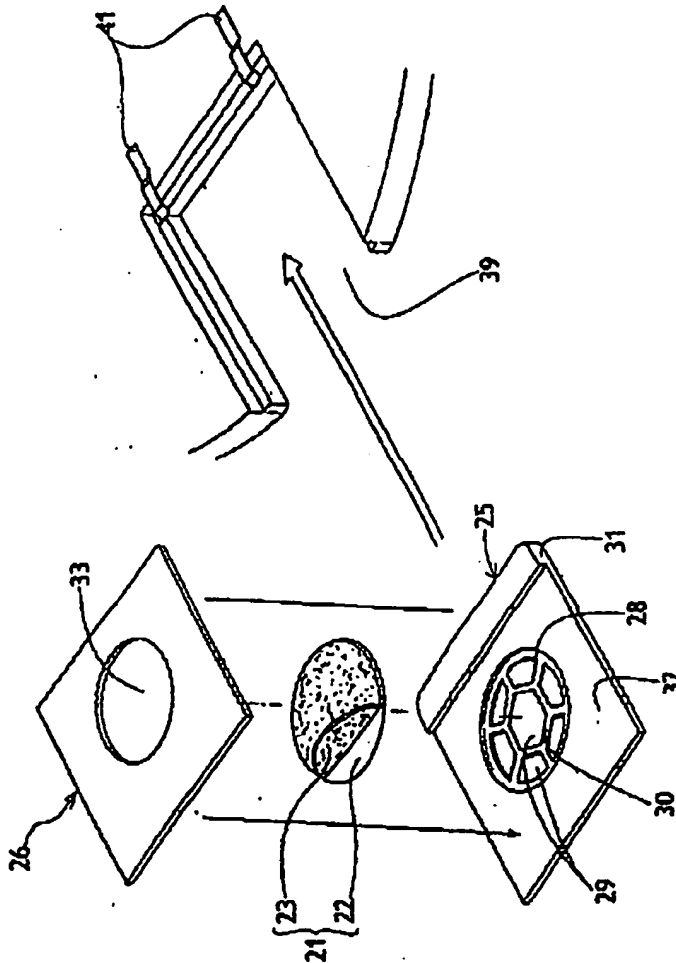


FIG. 10

Approved  
8/5/06